



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



MAR 29 2013

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**
District Facility # S-1372
Project # S-1120060

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. Plains Exploration & Production Company is proposing a Title V minor permit modification to incorporate the recently issued S-1372-194-13 into the Title V operating permit. Plains Exploration & Production Company has proposed to install a selective catalytic reduction system and to replace the duct burner for Rule 4703 compliance.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1372-194-13, emission increases, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

Enclosures

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
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San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



MAR 29 2013

Kenneth Bork
Plains Exploration & Production Company
1200 Discovery Drive, Suite 500
Bakersfield, CA 93309

**Re: Notice of Minor Title V Permit Modification
District Facility # S-1372
Project # S-1120060**

Dear Mr. Bork:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued S-1372-194-13 into the Title V operating permit. Plains Exploration & Production Company has proposed to install a selective catalytic reduction system and to replace the duct burner for Rule 4703 compliance.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1372-194-13, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

David Warner
Director of Permit Services

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TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1120060

Engineer: Kris Rickards
Date: March 20, 2013

Facility Number: S-1372
Facility Name: Plains Exploration & Production Company
Mailing Address: 1200 Discovery Drive, Suite 500
Bakersfield, CA 93309

Contact Name: Kenneth Bork
Phone: 661-395-5458

Responsible Official: Steven P. Rusch
Title: Vice President - EHS & Government Affairs

RWK

3/26/13

I. PROPOSAL

Plains Exploration & Production Company is proposing a Title V minor permit modification to incorporate the recently issued S-1372-194-13 into the Title V operating permit. This ATC authorized the installation of a selective catalytic reduction system and the replacement of the duct burner for Rule 4703 compliance.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

The equipment is located at PXP's Welpport Lease in the Cymric Oilfield, within the SE/4 of Section 36, Township 29S, Range 21E.

III. EQUIPMENT DESCRIPTION

S-1372-194-16: 5.0 MW COGEN FACILITY INCLUDING SOLAR TAURUS MODEL 60-T73005 GAS FIRED TURBINE ENGINE GENERATOR SET WITH SOLONOX COMBUSTORS, GAS FIRED MAXFIRE MODEL 110 SERIES DUCT BURNER, SCR, AND HEAT RECOVERY STEAM GENERATOR

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

Plains Exploration & Production Company is proposing to install a SCR system with ammonia injection and replace the duct burners for Rule 4703 compliance. Modifications for the current dormant permit are as follows:

Permit conditions 1, 2, and 3 were removed as they apply only to the dormant status:

1. ~~No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010]~~
2. ~~The fuel supply line shall be physically disconnected from this unit. [District Rule 4703]~~
3. ~~This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4703 and all other applicable District regulations. [District Rule 4703]~~

The following Draft Permit conditions were added for compliance with the new SCR system and associated controls:

4. Start-up and Shutdown emissions shall not exceed: 25 ppmv NO_x (as NO₂) @ 15% O₂ (0.0921 lb/MMBtu), 200 ppmv CO @ 15% O₂ (0.4484 lb/MMBtu). [District Rules 2201 and 4703]
5. Ammonia emissions shall not exceed 20 ppmv @ 15% O₂. [District Rule 2201]
9. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each period of start-up or shutdown. [District Rule 2201]
23. Exhaust shall be equipped with provisions for sampling ammonia concentration. [District Rule 2201]

28. Gas turbine engine shall not be operated when ammonia injection or SCR system is not operating. [District Rule 2201]

Permit condition 4 was removed as it was redundant of and less stringent than the PUC gas requirement of permit condition 7 (draft permit condition 10):

4. ~~Unit shall be fired exclusively on PUC quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b); 60.332(a)]~~
10. Gas turbine engine and duct burner shall only be fired on PUC quality or equivalent sulfur content natural gas. [District Rule 2201 and 40 CFR 60.333(a) & (b); 60.332(a)]

Permit condition 12 was modified as follows to be consistent with the hourly rate on other permits:

12. Heat input to gas turbine engine/duct burner system shall not exceed ~~1,880.16~~78.34 MMBtu/day~~hr.~~ [District Rule 2201]

Permit conditions 13 and 14 were modified for Rule 4703 compliance and consolidated as draft permit condition 2:

13. ~~Except during transitional periods, NO_x emissions shall not exceed 25 ppmvd @ 15% O₂. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rules 2201 and 4703, 5.1.2]~~
14. ~~Except during transitional periods, CO emissions shall not exceed 200 ppmvd @ 15% O₂. [District Rules 2201 and 4703, 5.2]~~
2. Except during periods of startup and shutdown, gas turbine engine and duct burner combined emission rates shall not exceed 5 ppmv NO_x (as NO₂) @ 15% O₂ (0.0184 lb/MMBtu) nor 200 ppmv CO @ 15% O₂ (0.4484 lb/MMBtu). [District Rules 2201 and 4703]

Permit condition 15 was modified as follows to reflect emissions on a heat input basis:

15. Gas turbine engine and duct burner combined emission rate shall not exceed: PM₁₀: ~~0.72 lb/hr~~, SO_x (as SO₂): ~~0.06 lb/hr~~, VOC: ~~0.38 lb/hr~~, and CO: ~~16.70 lb/hr~~0.00285 lb-SO_x/MMBtu, 0.0066 lb-PM₁₀/MMBtu, 0.0021 lb-VOC/MMBtu (as methane). [District Rule 2201]

Permit conditions 17 and 18 were updated for Rule 4703 compliance:

17. Gas turbine engine start-up is defined as the that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703]

18. Gas turbine engine shutdown is defined as the that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]

Permit conditions 22 and 30 were consolidated into draft permit condition 29 as follows:

22. ~~Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted annually. [District Rule 4703, 6.3.1]~~
30. ~~Source testing shall be witnessed or authorized by District personnel, and the source test results shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.2 and 4703, 6.3]~~
29. NOx and CO emissions shall be measured annually pursuant to requirements of Rule 4703 by District witnessed sample collection by independent laboratory corrected to 15% O2 (dry). Test results shall be submitted within 60 days. [District Rules 2201 and 4703]

Permit conditions 25, 26, and 27 were consolidated into draft permit condition 15 as follows:

25. ~~Oxides of nitrogen emissions for compliance tests shall be determined by using EPA Method 7E or EPA Method 20. [District Rule 4703, 6.4.1]~~
26. ~~Carbon monoxide emissions for compliance tests shall be determined by using EPA Test Methods 10 or 10B. [District Rule 4703, 6.4.2]~~
27. ~~Oxygen content of the exhaust gas shall be determined by using EPA Methods 3, 3A, or 20. [District Rule 4703, 6.4.3]~~
15. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E, 20, or ARB Method 100; CO using EPA Method 10 or ARB Method 100; and oxygen (O2) using EPA Method 3, 3A, 20, or ARB Method 100. [40 CFR 60.335(b) and District Rule 4703, 6.4]

Draft permit conditions 24 and 25 were added for compliance with monitoring emissions with a portable emissions monitor:

24. The permittee shall monitor and record the stack concentration of NOx, CO, O2, and NH3 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]

25. If the NO_x, CO, O₂, and/or NH₃ concentrations, as measured by the permittee with a portable analyzer exceed the permitted emission limits, the permittee shall notify the District and return the NO_x, CO, O₂, and NH₃ concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4703]

Permit condition 29 was simplified as draft permit condition 31 as follows:

- ~~29. The District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. [District Rules 1081, 7.1 and 4703, 6.3]~~
31. Operator shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081]

Permit conditions 32, 36, and 37 were consolidated as draft permit condition 35 as follows:

- ~~32. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703]~~
- ~~36. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used (liquid/gas). [District Rule 4703, 6.2.6]~~
- ~~37. The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8]~~
35. Permittee shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, quantity of fuel used, and duration of all start-up and shutdown periods. [40 CFR 60.332(a),(b) District Rule 4703, 6.2.6, 6.2.8]

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application ~~meets~~ the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit No. S-1372-194-16
- B. Authority to Construct No. S-1372-194-13
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit No. S-1372-194-15

ATTACHMENT A

Proposed Modified Title V Operating Permit No.
(S-1372-194-16)

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1372-194-16

EXPIRATION DATE: 05/31/2016

SECTION: SE36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

5.0 MW COGEN FACILITY INCLUDING SOLAR TAURUS MODEL 60-T73005 GAS FIRED TURBINE ENGINE GENERATOR SET WITH SOLONOX COMBUSTORS, GAS FIRED MAXFIRE MODEL 110 SERIES DUCT BURNER, SCR, AND HEAT RECOVERY STEAM GENERATOR

PERMIT UNIT REQUIREMENTS

1. Lube oil vent relief valve emission rate shall not exceed PM10: 0.09 lb/hr, and VOC: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Except during periods of startup and shutdown, gas turbine engine and duct burner combined emission rates shall not exceed 5 ppmv NOx (as NO2) @ 15% O2 (0.0184 lb/MMBtu) nor 200 ppmv CO @ 15% O2 (0.4484 lb/MMBtu). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
3. Gas turbine engine and duct burner combined emission rates shall not exceed: 0.00285 lb-SOx/MMBtu, 0.0066 lb-PM10/MMBtu, 0.0021 lb-VOC/MMBtu (as methane). [District Rule 2201] Federally Enforceable Through Title V Permit
4. Start-up and Shutdown emissions shall not exceed: 25 ppmv NOx (as NO2) @ 15% O2 (0.0921 lb/MMBtu), 200 ppmv CO @ 15% O2 (0.4484 lb/MMBtu). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. Ammonia emissions shall not exceed 20 ppmv @ 15% O2. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas turbine engine start-up is that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
7. Gas turbine engine shutdown is that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
8. Transitional Period is defined as any of the following: bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown. [District Rule 4703, 3.33] Federally Enforceable Through Title V Permit
9. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each period of start-up or shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Gas turbine engine and duct burner shall only be fired on PUC quality or equivalent sulfur content natural gas. [District Rule 2201 and 40 CFR 60.333(a) & (b); 60.332(a)] Federally Enforceable Through Title V Permit
11. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
13. The concentration of sulfur compounds in the exhaust from combustion equipment shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 4801 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
15. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E, 20, or ARB Method 100; CO using EPA Method 10 or ARB Method 100; and oxygen (O2) using EPA Method 3, 3A, 20, or ARB Method 100. [40 CFR 60.335(b) and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
16. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit
17. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.2] Federally Enforceable Through Title V Permit
18. Permittee shall operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
19. Permittee shall operate, monitor and maintain the SoLoNOx lean pre-mixed combustion system in full accordance with manufacturer's recommendations. [40 CFR 60.334; District Rule 4703, 6.2.2 and 6.2.5] Federally Enforceable Through Title V Permit
20. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit
21. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
22. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Exhaust shall be equipped with provisions for sampling ammonia concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
24. The permittee shall monitor and record the stack concentration of NOx, CO, O2, and NH3 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. If the NO_x, CO, O₂, and/or NH₃ concentrations, as measured by the permittee with a portable analyzer exceed the permitted emission limits, the permittee shall notify the District and return the NO_x, CO, O₂, and NH₃ concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4703] Federally Enforceable Through Title V Permit
26. Gas turbine engine/duct burner system shall be equipped with recording fuel gas flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Heat input to gas turbine engine/duct burner system shall not exceed 78.34 MMBtu/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Gas turbine engine shall not be operated when ammonia injection or SCR system is not operating. [District Rule 2201] Federally Enforceable Through Title V Permit
29. NO_x and CO emissions shall be measured annually pursuant to requirements of Rule 4703 by District witnessed sample collection by independent laboratory corrected to 15% O₂ (dry). Test results shall be submitted within 60 days. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
30. For source testing, NO_x emissions shall be averaged using consecutive 15-minute sampling periods over a three-hour period. [District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
31. Operator shall conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
32. Duct burner fuel gas supply shall be equipped with injection pressure indicator. [District Rule 1070] Federally Enforceable Through Title V Permit
33. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
34. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
35. Permittee shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, quantity of fuel used, and duration of all start-up and shutdown periods. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.6, 6.2.8] Federally Enforceable Through Title V Permit
36. Permittee shall keep accurate daily records of the quantity and heating value (btu/scf) of the fuel gas supplied to the gas turbine engine/duct burner system. [District Rule 2201] Federally Enforceable Through Title V Permit
37. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]
38. A cogeneration facility which commenced construction prior to November 15, 1990, and was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale, is not an affected unit subject to the requirements of the Acid Rain Program. Therefore, the requirements of 40 CFR 72 do not apply to this source. A permit shield is granted from this requirement. [40 CFR 72.6(b)(4)(i) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

39. {1713} The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Operate.

ATTACHMENT B

Authority to Construct No.
(S-1372-194-13)

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1372-194-13

ISSUANCE DATE: 08/12/2009

LEGAL OWNER OR OPERATOR: PLAINS EXPLORATION & PRODUCTION COMPANY

MAILING ADDRESS: ATTN: KENNETH BORK
1200 DISCOVERY DRIVE, SUITE 500
BAKERSFIELD, CA 93309

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
CA

SECTION: SE36 TOWNSHIP: 29S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 5.0 MW COGEN FACILITY INCLUDING SOLAR TAURUS MODEL 60-T73005 GAS FIRED TURBINE ENGINE GENERATOR SET WITH SOLONOX COMBUSTORS, GAS FIRED DUCT BURNER, AND HEAT RECOVERY STEAM GENERATOR; ADD SCR SYSTEM WITH AMMONIA INJECTION, REPLACE 31 MMBTU/HR DUCT BURNER WITH CE NATCO (OR EQUIVALENT) BURNER, AND LOWER NOX EMISSION LIMIT TO 5 PPMV @ 15% O2 FOR RULE 4703 TIER 3 COMPLIANCE

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The permittee shall notify the District of the compliance method chosen (replacement burner or tuning) and if applicable, the approved burner to be installed prior to implementation of this ATC. [District Rule 2201]
3. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this ATC. Approval of the equivalent equipment shall be made in writing and only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the authorized equipment [District Rule 2010]
4. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emissions rates, equipment drawing(s) and operational characteristics/parameters [District Rule 2010]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Sayed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

S-1372-194-13 : Mar 20 2013 10:30AM - RICKARDK : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

5. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. Lube oil vent relief valve emission rate shall not exceed PM10: 0.09 lb/hr, and VOC: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during periods of startup and shutdown, gas turbine engine and duct burner combined emission rates shall not exceed 5 ppmv NOx (as NO2) @ 15% O2 (0.0184 lb/MMBtu) nor 200 ppmv CO @ 15% O2 (0.4484 lb/MMBtu). [District Rules 2201 and 4703]
8. Gas turbine engine and duct burner combined emission rates shall not exceed: 0.00285 lb-SOx/MMBtu, 0.0066 lb-PM10/MMBtu, 0.0021 lb-VOC/MMBtu (as methane). [District Rule 2201]
9. Start-up and Shutdown emissions shall not exceed: 25 ppmv NOx (as NO2) @ 15% O2 (0.0921 lb/MMBtu), 200 ppmv CO @ 15% O2 (0.4484 lb/MMBtu). [District Rules 2201 and 4703]
10. Ammonia emissions shall not exceed 20 ppmv @ 15% O2. [District Rule 2201]
11. Gas turbine engine start-up is that period of time not exceeding two hours in duration during which the unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rules 2201 and 4703]
12. Gas turbine engine shutdown is that period of time not exceeding two hours in duration during which the unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rules 2201 and 4703]
13. The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each period of start-up or shutdown. [District Rule 2201]
14. Gas turbine engine and duct burner shall only be fired on PUC quality or equivalent sulfur content natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
15. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
16. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
17. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
18. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E, 20, or ARB Method 100; CO using EPA Method 10 or ARB Method 100; and oxygen (O2) using EPA Method 3, 3A, 20, or ARB Method 100. [40 CFR 60.335(b) and District Rule 4703, 6.4]
19. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.2] Federally Enforceable Through Title V Permit
20. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rule 1081, 4201, 3.1; Rules 406 (Fresno), 407 (Kings, San Joaquin, Stanislaus, Tulare, Merced, and Kern), and 404(Madera); 40 CFR 60.332(c), (d); 60.334 (b), and (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
22. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: SJVUAPCD Rule 4703, 6.2.2; Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); Rules 402 (Madera) and 404 (Fresno, Kern, Kings, San Joaquin, Merced, Stanislaus, Tulare); 40 CFR 60.332 (a) and (b); 60.333(a) and (b); 60.334 (a), (b), and (c)(1); 60.335 (a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
23. Compliance with the permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
24. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.2] Federally Enforceable Through Title V Permit
25. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
26. Permittee shall operate, monitor and maintain the SoLoNOx lean pre-mixed combustion system in full accordance with manufacturer's recommendations. [40 CFR 60.334; District Rule 4703, 6.2.2 and 6.2.5] Federally Enforceable Through Title V Permit
27. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit
28. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
29. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Cogeneration unit shall be equipped with selective catalytic reduction. [District Rule 2201]
31. Exhaust shall be equipped with provisions for sampling ammonia concentration. [District Rule 2201]
32. The permittee shall monitor and record the stack concentration of NOx, CO, O2, and NH3 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320]
33. If the NOx, CO, and/or O2 concentrations, as measured by the permittee with a portable analyzer or the NH3 concentration exceed the permitted emission limits, the permittee shall notify the District and return the NOx, CO, O2, and NH3 concentrations to the permitted emission limits as soon as possible but no longer than eight (8) hours after detection. If the permittee's portable analyzer readings continue to exceed the permitted emission limits after eight (8) hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4703]
34. Gas turbine engine/duct burner system shall be equipped with recording fuel gas flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
35. Heat input to gas turbine engine/duct burner system shall not exceed 78.34 MMBtu/hr. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

36. Gas turbine engine shall not be operated when ammonia injection or SCR system is not operating. [District Rule 2201]
37. NOx and CO emissions shall be measured annually pursuant to requirements of Rule 4703 by District witnessed sample collection by independent laboratory corrected to 15% O2 (dry). Test results shall be submitted within 60 days. [District Rules 2201 and 4703]
38. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit
39. Duct burner fuel gas supply shall be equipped with injection pressure indicator. [District Rule 1070] Federally Enforceable Through Title V Permit
40. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
41. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
42. Permittee shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, quantity of fuel used, and duration of all start-up and shutdown periods. [District Rule 4703, 6.2.6, 6.2.8]
43. Permittee shall keep accurate daily records of the quantity and heating value (btu/scf) of the fuel gas supplied to the gas turbine engine/duct burner system. [District NSR Rule] Federally Enforceable Through Title V Permit
44. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-1372-194	0	0	0	0	0
TOTAL	0	0	0	0	0

ATTACHMENT D

Application

San Joaquin Valley Air Pollution Control District


www.valleyair.org

RECEIVED
JAN - 5 2012

SJVAPCD
Southern Region

Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: Plains Exploration & Production Company	
2. MAILING ADDRESS:	
STREET/P.O. BOX: 1200 Discovery Drive, Suite 500	
CITY: Bakersfield	STATE: California
9-DIGIT ZIP CODE: 93309	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	INSTALLATION DATE:
STREET: Western Kern County, Heavy Oil Stationary Source	
SE 1/4 SECTION 36 TOWNSHIP 29S RANGE 21E	
1/4 SECTION TOWNSHIP RANGE	
1/4 SECTION TOWNSHIP RANGE	
1/4 SECTION TOWNSHIP RANGE	
4. GENERAL NATURE OF BUSINESS: Oil and Gas Production	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) S-1372-194-13 CONVERT ATC S-1372-194-13 (COGEN).	
6. TYPE OR PRINT NAME OF APPLICANT: Kenneth R. Bork	TITLE OF APPLICANT: Environmental Advisor
7. SIGNATURE OF APPLICANT:  FOR KRB	DATE: 1/5/12
	PHONE: (661) 395-5458 FAX: (661) 395-5298 EMAIL: kbork@pxp.com

For APCD Use Only:

NO \$

DATE STAMP	FILING FEE RECEIVED: \$	CHECK#:
	DATE PAID:	
	PROJECT NO: S-1120000	FACILITY ID: S-1372

TV MM

**San Joaquin Valley
Unified Air Pollution Control District**

RECEIVED
JAN - 5 2012
SJVAPCD
Southern Region

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

☒ SIGNIFICANT PERMIT MODIFICATION
☒ MINOR PERMIT MODIFICATION

☐ ADMINISTRATIVE
AMENDMENT

COMPANY NAME: <u>Plains Exploration & Production Company</u>	FACILITY ID: <u>S - 1372</u>
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: <u>Plains Exploration & Production Company</u>	
3. Agent to the Owner: <u>Steven P. Rusch</u>	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- [Signature]* ☒ Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- [Signature]* ☒ Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- [Signature]* ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- [Signature]* ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

[Signature]
Signature of Responsible Official

1/5/12
Date

Steven P. Rusch
Name of Responsible Official (please print)

Vice President-EHS & Governmental Affairs
Title of Responsible Official (please print)

ATTACHMENT E

Previous Title V Operating Permit No.
(S-1372-194-15)

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1372-194-15

EXPIRATION DATE: 05/31/2016

SECTION: SE36 **TOWNSHIP:** 29S **RANGE:** 21E

EQUIPMENT DESCRIPTION:

NON-COMPLIANT DORMANT 4.72 MW COGEN FACILITY INCLUDING SOLAR TAURUS MODEL 60-T73005 GAS FIRED TURBINE ENGINE GENERATOR SET WITH SOLONOX COMBUSTORS, GAS FIRED DUCT BURNER, AND HEAT RECOVERY STEAM GENERATOR

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010]
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4703]
3. This equipment shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4703 and all other applicable District regulations. [District Rule 4703]
4. Unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(a) & (b);60.332(a)] Federally Enforceable Through Title V Permit
5. Duct burner fuel gas supply shall be equipped with injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas turbine lube oil system atmospheric vent shall be equipped with aerosol/smoke control provisions. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas turbine engine and duct burner shall be fired on PUC quality or equivalent sulfur content natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Gas turbine engine/duct burner system shall be equipped with recording fuel gas flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
10. Permittee shall operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [District Rule 4703, 6.2] Federally Enforceable Through Title V Permit
11. Permittee shall operate, monitor and maintain the SoLoNOx lean pre-mixed combustion system in full accordance with manufacturer's recommendations. [40 CFR 60.334; District Rule 4703, 6.2.2 and 6.2.5] Federally Enforceable Through Title V Permit
12. Heat input to gas turbine engine/duct burner system shall not exceed 1,880.16 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Except during transitional periods, NOx emissions shall not exceed 25 ppmvd @ 15% O₂. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rules 2201 and 4703, 5.1.2] Federally Enforceable Through Title V Permit
14. Except during transitional periods, CO emissions shall not exceed 200 ppmvd @ 15% O₂. [District Rules 2201 and 4703, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. Gas turbine engine and duct burner combined emission rate shall not exceed PM10: 0.72 lb/hr, SOx (as SO2): 0.06 lb/hr, VOC: 0.38 lb/hr, and CO: 16.70 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Lube oil vent relief valve emission rate shall not exceed PM10: 0.09 lb/hr, and VOC: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. [District Rule 4703, 3.29] Federally Enforceable Through Title V Permit
18. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.26] Federally Enforceable Through Title V Permit
19. Transitional Period is defined as any of the following: bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown. [District Rule 4703, 3.33] Federally Enforceable Through Title V Permit
20. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
21. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
22. Source testing to demonstrate compliance with NOx and CO emission limits shall be conducted annually. [District Rule 4703, 6.3.1] Federally Enforceable Through Title V Permit
23. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
24. For source testing, NOx emissions shall be averaged using consecutive 15-minute sampling periods over a three-hour period. [District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
25. Oxides of nitrogen emissions for compliance tests shall be determined by using EPA Method 7E or EPA Method 20. [District Rule 4703, 6.4.1] Federally Enforceable Through Title V Permit
26. Carbon monoxide emissions for compliance tests shall be determined by using EPA Test Methods 10 or 10B. [District Rule 4703, 6.4.2] Federally Enforceable Through Title V Permit
27. Oxygen content of the exhaust gas shall be determined by using EPA Methods 3, 3A, or 20. [District Rule 4703, 6.4.3] Federally Enforceable Through Title V Permit
28. The HHV and LHV of gaseous fuels shall be determined by using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81. [40 CFR 60.335(b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
29. The District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. [District Rules 1081, 7.1 and 4703, 6.3] Federally Enforceable Through Title V Permit
30. Source testing shall be witnessed or authorized by District personnel, and the source test results shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.2 and 4703, 6.3] Federally Enforceable Through Title V Permit
31. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
32. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(a),(b) and District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

33. Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.2] Federally Enforceable Through Title V Permit
34. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Federally Enforceable Through Title V Permit
35. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required by an applicable subpart. All reports shall be postmarked by the 30th day of each calendar half (or quarter, as appropriate). [40 CFR 60.7(c)] Federally Enforceable Through Title V Permit
36. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up time and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used (liquid/gas). [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
37. The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit
38. Permittee shall keep accurate daily records of the quantity and heating value (btu/scf) of the fuel gas supplied to the gas turbine engine/duct burner system. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The owner or operator shall maintain all records for a period of five years from the date of data entry and shall make such records available to the APCO upon request. [District Rule 4703, 6.2.4] Federally Enforceable Through Title V Permit
40. The concentration of sulfur compounds in the exhaust from combustion equipment shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rules 4801 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
41. A cogeneration facility which commenced construction prior to November 15, 1990, and was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale, is not an affected unit subject to the requirements of the Acid Rain Program. Therefore, the requirements of 40 CFR 72 do not apply to this source. A permit shield is granted from this requirement. [40 CFR 72.6(b)(4)(i) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

